FONTON

SPECIALIZE IN LEAD-FREE

BGA Rework Station

Model 936UA

Efficient · Reliable · User-Friendly

High Efficiency is the ultimate goal in our constant pursue of perfection. Possessing fine heating element with 1000W upper hot air injection and ultra large IR bottom heating system, 936UA offers excellent efficiency in soldering and desoldering performance. Versatile clampers is specially designed for various P.C.B. from mobile phone to server field.

Reliability of 936UA guarantees the quality and stable yield rate. The use of New Fuzzy Industrial Microprocessor and Aviation Industrial Precision Linear Mechanism brings more accurate and reliable result. Precise and clear Different Color Alignment System makes alignment trustworthy.

User-Friendly design with integrated operation interface brings working pleasure to operators. No need for extra equipment or air-supply, AC power itself is sufficient. Within 2 hours of training, operator could understand and operate our intuitive operation controller with ease for it is that user friendly.

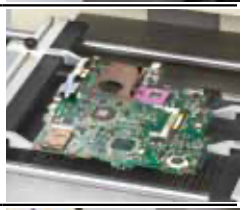
Perfect Performance

Fast Alignment Calibration Design

Ultra Large Bottom Heating

Auto Quick Cooling System

Versatile PCB Clampers



Programmable Reflow System

HIGH PRECISION

Fast Alignment Calibration

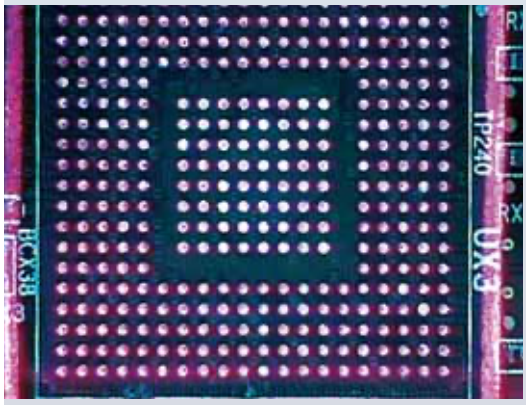
Fast Alignment Calibration design

- Fast alignment calibration design shortens adjustment time significantly.
- Auto / manual option for Z spindle. Fully enhanced soldering efficiency and easy operation.
- Quick and smooth movement, accurate location with aviation industrial precision linear motion guide.

Fast Alignment calibration design
Best coaxial mechanism and fast calibration adjustment design

The coaxial mechanism avoid CSP chips moving

- Fully prevent aligned BGA chips to deviate due to movement.
- Can proceed BGA alignment procedure and soldering work simultaneously.
- Best precision even for continuous long term usage. No need to adjust X, Y shafts at all.



Bright Color Comparison
Simply overlap the red of solder balls and pad into one image

Different Color Alignment System makes perfect image

- When images of chip and PCB overlap, comparison between the two images will be very clear.
- Special design for CSP (μBGA. Tiny BGA), fine pitch BGA and LLP.

High Precision device for fast chip Location

- High Precision device for fast BGA chip Location, tolerance is within ±0.025mm.
- Fast, safe, efficient solution. No more solder paste trouble resulted from direct contact with hand.

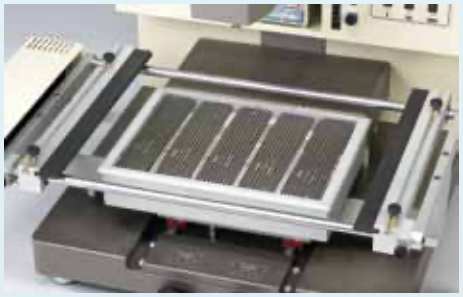
Fast Chip Feeder (Option)

EFFICIENT

Ultra Large Bottom Heating Design

High efficient soldering with IR System

- The use of IR heating element offers high efficient soldering and desoldering.
- Ultra large preheating area: 360 x 260 mm. It can be divided into 3 zones for different sizes of P.C.B.
- Rapid desoldering and soldering: increase 50% efficiency.
- Preheating zone can be operated synchronously or independently. Completely solve warpage / twist problem cause by uneven / tiny preheating.
- Module design: low cost for maintenance and repair.



Ultra Large Bottom Heating
Shorten preheating time and offers sufficient and even preheating to all PCB

Quick Cooling System Provides high efficiency

- Drastically reduce cooling time by 50 % than other designs.
- Work with electricity and no extra air compressor needed.
- Built-in auto cooling system highly increase 50% work efficiency.

Auto Quick Cooling System
Increase 50 % cooling efficiency

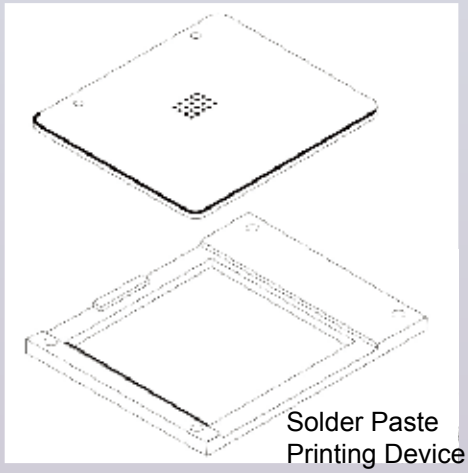
Multi-function Clampers for various P.C.Board

- Versatile clampers is suited for standard and special P.C.Board.
- PCB fast loading device shortens fixing time for P.C. Board.
- Offering good support for uneven shape PCB prevents P.C. Board from warping or twisting.

Multi-function clampers
It is suitable for various P.C.Board.

High precision LLP chip solder Paste printing device

- Able to directly locate printing fixture on alignment system for perfect alignment effect.
- Average printing time for one BGA / LLP chip is within 30 seconds.
- Unified Flux thickness from Solder Paste Printing device provides users the best reflow quality.



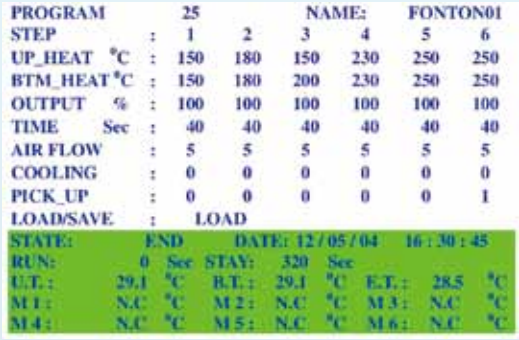
Solder Paste
Printing Device

SMART

New Fuzzy Industrial Microprocessor

New Fuzzy Industrial Microprocessor System with USB Disk Data Storage

- PC-based Industrial-Level Microprocessor System and LCD panel brings more accurate and stable operation.
- All the parameter and heating process can be recorded without extra PC or equipment connection.
- Auto Pick-up vacuum function makes reflow / Desoldering of BGA and LLP chips easier.
- Design for independent operation. No need for additional equipment.



Clear Temperature Parameter List

Easy and Quick to Set up Parameter

- All parameter can be directly settled on the LCD panel without using any other facility. Besides, it is equipped with extra removable controller for easy operation.
- Reflow profile can be 100% set up in advance and operators can also set up parameter by themselves effortlessly.

Profile inspection System

Fast 99 sets Show-up and Professional Profile Inspect System

- Easy to make a qualified program against the profile inspection result.
- Fast check on 99 sets of profile memories: completely solves the profile reset problem caused by the difference of BGA chips. Save operation time and enhance production efficiency.
- Unlimited profile spaces: In addition to fast check function, operators can install as many as temperature profile they wish on BGA-936UA via built-in USB Disk Port. “Once used, forever memorized” is our constant promise to clients.

Six Temperature Detectors

Built-in 6 Temperature Detectors

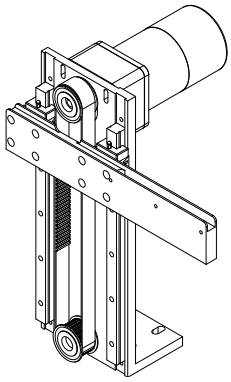
- Six Sets of thermocouple can measure the heating characteristic of BGA body and PC Board directly.
- Reflow profile can be 100% set up and operator can easily set up parameter without complicated training course in advance.
- Chinese and English version available.

SUPER FINE

Automatic Mechanism and Durable Structure

User-Friendly interface save time and manpower

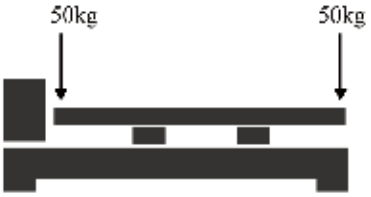
- User-friendly design: no more damage due to improper operation in CCD camera system. Alignment system will automatically turn off while soldering head is going down.
- Heating Head and CCD camera: directly controlled by Microprocessor or heating head control box aside.
- Extremely easy operation: CCD and Heating head move automatically and programmable vacuum function.



Super Fine Automatic Mechanism

Durable Structure and Modular design for Easy Maintenance

- Durable structure design: The presence of 50 kg heavy objects on both sides of P.C.B. clamper causes no shake.
- Advanced liner motion guide: Not only does it smoothen the movement of the table, but also strengthens the whole structure, making it more durable.



Durable PCB Clamper table

SPECIFICATION

Main Voltage	220 ±10V AC
Power Consumption	Max. 6100W
Preset Temp. of Top	50 ºC ~ 399 ºC (122ºF ~ 750) ºF)
Preset Temp. of Bottom	50 ºC ~ 399 ºC (122ºF ~ 750 ºF)
Top Heater	1000W
Bottom Heater	1000W//3000W/5000W (adjustable)
Air Spouting	250 l/min Max. (adjustable)
Vacuum Pump	Diaphragm 420mm Hg Max.
Working Lamp	5 W 12V
P.C Board Size Capacity	600mm x 460 mm (600mmx680mm)
Applicable Devices	Max. 80mm x 80mm
Vision Magnification	Standard up to 20x. option 40x,
Dimensions	62(W) x 62(H) x 70(D)cm
Weight	98 kg

ACCESSORIES

High-Resolution TFT 17” LCD packages	1 set
Monitor mount Plate	1 set
Hex key wrench	1 set
Vacuum Pads (Ø5 Ø10 Ø15)	3pcs(one piece for each)
Center Support	1 set

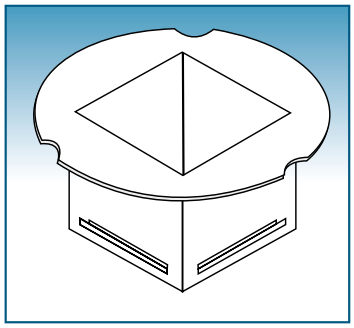
OPTIONAL ACCESSORIES

1. Complete range of standard and custom nozzles
2. Gloves with high temperature resistance
3. Various sizes of vacuum pads. (Ø2, Ø5, Ø10, Ø15)
4. Clamper for special P.C. Board.
5. Electronic Dry Cabinet
6. LLP Fixture
7. Fast Chip Feeder
8. Table

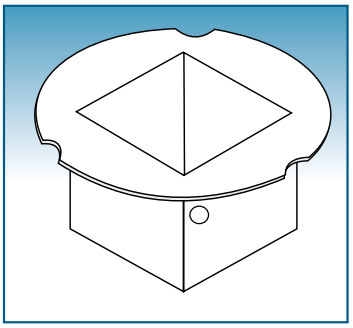
NOZZLES

FOR BGA-936UA

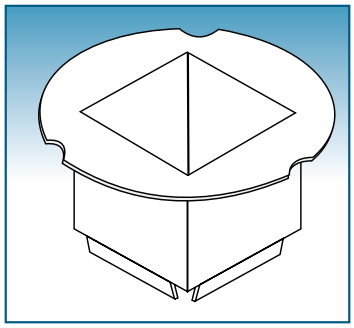
A)OPEN HALL(OH)



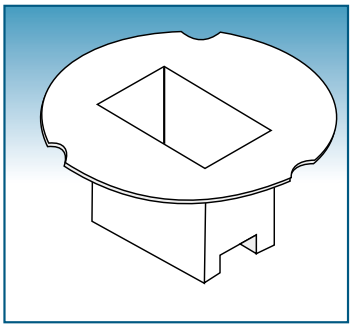
B)CLOSE HALL(CH)



C)SOJ.PLCC

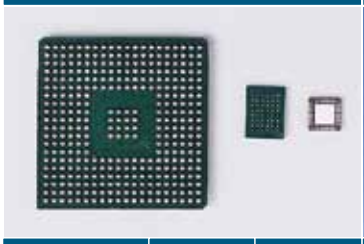


C)DIP.PGA



The BGA 936UA suits every type of BGA & SMD, only needs to change the NOZZLE.

NOZZLE SIZE (· COMMON SIZE, ▲SPECIAL SIZE) UNIT mm

BGA/CSP/LLP				SOP.QFP				SOJ.PLCC				DIP-PGA			
															
NO .	SIZE	TYPE		NO .	SIZE	TYPE		NO .	SIZE	TYPE		NO .	SIZE	TYPE	
		OH	CH			OH	CH			OH	CH			OH	CH
BGA-N001	5 x 5		•	BGA-N041	13 x 12		•	BGA-N081	10 x 17		•	BGA-N121	10 x 20		•
BGA-N004	5 x 10		•	BGA-N043	13 x 20		•	BGA-N083	12 x 19		•	BGA-N122	10 x 22.5		•
BGA-N007	10 x 10		•	BGA-N045	15 x 22		•	BGA-N085	12 x 27		•	BGA-N123	10 x 25		•
BGA-N010	10 x 15		•	BGA-OPT46	7 x 7		•	BGA-N090	12 x 12		•	BGA-N124	10 x 27.5		•
BGA-N016	16 x 24		•	BGA-N047	17 x 30		•	BGA-N091	14 x 14		•	BGA-N131	18 x 32		•
BGA-N020	29 x 29	•	▲	BGA-N051	11 x 11		•	BGA-N093	17 x 15		•	BGA-N133	18 x 37		•
BGA-N024	37 x 37	•	▲	BGA-N052	13 x 13		•	BGA-N095	20 x 20		•	BGA-N135	18 x 42		•
BGA-N025	39 x 39	•	▲	BGA-N053	15 x 15		•	BGA-N096	25 x 25		•	BGA-N139	18 x 52		•
BGA-N026	42 x 42		•	BGA-N054	17 x 17		•	BGA-N097	27 x 27		•	BGA-N141	21.5 x 21.5		•
BGA-N028	45 x 45		•	BGA-N055	19 x 19		•	BGA-N098	32 x 32		•	BGA-N143	29 x 29		•
BGA-N061	33 x 33		•	BGA-N056	21 x 21		•	BGA-N099	37 x 37		•	BGA-N145	34 x 34		•
BGA-OPT10	70 x 70		•	BGA-N057	23 x 23		•					BGA-N148	49 x 49		•
BGA-OPT43	10 x 12		•	BGA-N058	25 x 25		•								
BGA-OPT55	55 x 66		•	BGA-N059	26 x 20		•								
BGA-OPT57	58 x 48		•	BGA-N062	35 x 35		•								
BGA-OPT58	48 x 41		•												
BGA-OPT70	75 x 75		•												

Remarks:
Particular specifications for nozzles can be ordered. Please inform us the BGA specification, nozzle size or send us your parts sample.